

**ATTACHMENT H**  
**Cost Analysis**

RDS  
SUBREGION 1  
PROPOSED PROJECTS

Itemized Capital Costs (\$M)												
Name of Project	Type	Number of Wells	Wells	Pumping Station	Intake System Const. Cost	Land Acquisition Cost	Pipelines	Engineering, Administration and Legal	Estimated Pilot Project Cost	Total	Annual Operations and Maintenance	Estimated Benefit (MGD)
1A. Golden Gate Canal - 17th Ave. - Intake & Pump Station	Surface Water ASR			\$ 2,300,000	\$2,500,000			\$960,000		\$7,200,000		
1B. Golden Gate Canal - 17th Ave. - Well and Pipeline		28	\$15,400,000			\$1,400,000		\$3,080,000	1,850,000	\$27,170,000		
1C. Golden Gate Canal - 17th Ave. - Transmission Lines							\$3,620,544	\$724,109		\$5,440,000		
										\$39,810,000	\$840,000	20.0
2A. Golden Gate Canal - Airport Rd. - Intake & Pump Station	Surface Water ASR			\$ 3,000,000	\$3,000,000			\$1,200,000		\$9,000,000		
2B. Golden Gate Canal - Airport Rd. - Well and Pipeline		35	\$19,250,000			\$1,750,000	\$683,000	\$3,986,600	1,850,000	\$34,400,000		
										\$43,400,000	\$1,050,000	25.0
3A. Faka Union Slough-Intake & Pump	Surface Water ASR			\$ 3,000,000	\$3,000,000			\$1,200,000		\$9,000,000		
3B. Faka Union Slough-Well Pipeline		35	\$19,250,000			\$1,750,000		\$3,850,000	1,850,000	\$33,380,000		
3C. Faka Union Slough-Transmission Line							\$15,085,680	\$3,017,136		\$22,630,000		
										\$65,010,000	\$1,050,000	25.0
4A. Cocohatchee River- Intake & Pump Station	Surface Water ASR			\$ 900,000	\$1,000,000			\$380,000		\$2,850,000		
4B. Cocohatchee River- Well & Pipeline		8	\$4,400,000			\$400,000	\$156,000	\$911,200	1,850,000	\$9,650,000		
										\$12,500,000	\$210,000	5.0
5A. Kehl Canal-Intake & Pump Station	Surface Water ASR			\$ 1,700,000	\$1,700,000			\$680,000		\$5,100,000		
5B. Kehl Canal-Well & Pipeline		17	\$9,350,000			\$850,000	\$332,000	\$1,936,400	1,850,000	\$17,900,000		
										\$23,000,000	\$504,000	12.0
6A. N. Collier/BSU Interconnect- Pump Station	Reclaimed Water ASR			\$ 1,600,000	NA	NA		\$320,000		\$2,400,000		
6B. N. Collier/BSU Interconnect-Well & Pipeline		19	\$10,450,000					\$2,090,000	1,400,000	\$17,430,000		
6C. N. Collier/BSU Interconnect- Transmission Line							\$2,011,392	\$402,278		\$3,020,000		
										\$22,850,000	\$441,000	10.5
7A. S. Collier/Naples Interconnect- Pump Station	Reclaimed Water ASR			\$ 1,700,000	NA	NA		\$340,000		\$2,550,000		
7B. S. Collier/Naples Interconnect-Well & Pipeline		24	\$13,200,000				\$468,000	\$2,733,600	1,400,000	\$22,260,000		
										\$24,810,000	\$504,000	12.0
8A. Pelican Bay / 8B. Collier County North-Pump Station	Reclaimed Water ASR			\$ 1,350,000	NA	NA		\$270,000		\$2,030,000		
8A. Pelican Bay / 8B. Collier County North-Well & Pipeline		12	\$6,600,000				\$234,000	\$1,366,800	1,400,000	\$12,010,000		
										\$14,040,000	\$340,200	6.1
9A. Collier County South- Pump Station	Reclaimed Water ASR			\$ 1,000,000	NA	NA		\$200,000		\$1,500,000		
9B. Collier County South-Well & Pipeline		10	\$5,500,000				\$195,000	\$1,139,000	1,400,000	\$10,300,000		
										\$11,800,000	\$277,200	6.6
10A. Naples- Pump Station	Reclaimed Water ASR			\$ 900,000	NA	NA		\$180,000		\$1,350,000		
10B. Naples-Well & Pipeline		9	\$4,950,000				\$176,000	\$1,025,200	1,400,000	\$9,440,000		
										\$10,790,000	\$226,800	5.4
11A. Golden Gate- Pump Station	Reclaimed Water ASR			\$ 200,000	NA	NA		\$40,000		\$300,000		
11B. Golden Gate-Well & Pipeline		2	\$1,100,000				\$39,000	\$227,800	1,400,000	\$3,460,000		
										\$3,760,000	\$21,000	0.5
12A. Bonita Springs Utilities- Pump Station	Reclaimed Water ASR			\$ 400,000	NA	NA		\$80,000		\$600,000		
12B. Bonita Springs Utilities-Well & Pipeline		5	\$2,750,000				\$98,000	\$569,600	1,400,000	\$6,030,000		
										\$6,630,000	\$100,800	2.4
13A. Coli Cnty N/Coli. Cnty S. Intr. - Pump Station	Reclaimed Water ASR			\$ 1,900,000	NA	NA		\$380,000		\$2,850,000		
13B. Coli Cnty N/Coli. Cnty S. Intr. - Well & Pipeline		21	\$11,550,000				\$410,000	\$2,392,000	1,400,000	\$19,690,000		
										\$22,540,000	\$617,400	14.7
14A. Golden Gate Mine Pits - Intake & Pump Station	Surface Water			\$ 150,000	\$1,000,000	\$250,000		\$230,000		\$2,040,000		
14B. Golden Gate Mine Pits - Transmission Line							\$3,600,000	\$720,000		\$5,400,000		
										\$7,440,000	\$63,000	1.5
<b>TOTALS</b>		2251	\$123,750,000	\$ 20,100,000	\$12,200,000	\$6,400,000	\$27,108,616	\$36,631,723	\$20,450,000	\$308,380,000	\$6,245,400	111.5
The benefit for project 6, 7 and 13 are redundant from other ASR projects; therefore, they are not included in the total benefit.												
Wells: \$550,000 per well except for the pit wells that are shallow wells and are \$150,000.												
Pump Station Cost: Derived from Construc. Cost of Service Water P.S. figure 29-6 from the Pumping Station Handbook.												
Intake cost: For the first 5 MGD the cost is \$1M. For additional cost greater than 5 MGD the cost is \$ 100k per MGD.												
Land Cost: \$50,000/well. 500 ft well separation minimum												
Pipes: \$4/diameter ft												
Engineering = 20% of capital cost. Doesn't include the land cost.												
Total has a contingency of 25%												
O & M for Surface ASR= 0.14cents/1000 gals X10 months X 30 days/month												
O & M Reclaimed ASR or Mine Pits = \$1,5000* # wells +\$8,000 * Estimated benefit (MGD)												

RIDS  
SUBREGION 1  
PROPOSED PROJECTS

Name of Project	Amount Funded by SRF	3.00%	2.00%	0.00%	\$ -	25%	75%	100%	Principal Amount of Loan	Annual Debt Service	Debt Service Coverage(1)	Annual O & M Costs (2)	Total Annual Costs	Daily Benefit (1000 gal /day)	Average Days Per Year	Annual Benefit (1000 gal)	Cost per 1000 gallons
		Loan Repayment Reserve	Loan Service Fee	Surety Costs (%)	Underwriters Discount	Fiscal Year 1	FY 2	FY 3									
1C. Golden Gate Canal - 17th Ave.-Trans	\$39,810,000	\$1,194,300	\$796,200	\$0.00	\$ -	\$174,000	\$697,000	\$1,219,000	\$43,890,500	\$3,088,200	\$772,050	\$840,000	\$4,700,250	20,000	180	3,600,000	\$1.31
2B. Golden Gate Canal - Airport Rd.-Well	\$43,400,000	\$1,302,000	\$868,000	\$0.00	\$ -	\$190,000	\$760,000	\$1,329,000	\$47,849,000	\$3,366,700	\$841,675	\$1,050,000	\$5,258,375	25,000	180	4,500,000	\$1.17
3C. Faka Union Slough-Transmission Line	\$65,010,000	\$1,950,300	\$1,300,200	\$0.00	\$ -	\$284,000	\$1,138,000	\$1,991,000	\$71,673,500	\$5,043,000	\$1,260,750	\$1,050,000	\$7,353,750	25,000	180	4,500,000	\$1.63
4B. Cocohatchee River- Well & Pipeline	\$12,500,000	\$375,000	\$250,000	\$0.00	\$ -	\$55,000	\$219,000	\$383,000	\$13,782,000	\$969,700	\$242,425	\$210,000	\$1,422,125	5,000	180	900,000	\$1.58
5B. Kehl Canal-Well & Pipeline	\$23,000,000	\$690,000	\$460,000	\$0.00	\$ -	\$101,000	\$403,000	\$704,000	\$25,358,000	\$1,784,200	\$446,050	\$504,000	\$2,734,250	12,000	180	2,160,000	\$1.27
6C. N. Collier/BSU Interconnect-Transmis	\$22,850,000	\$685,500	\$457,000	\$0.00	\$ -	\$100,000	\$400,000	\$700,000	\$25,192,500	\$1,772,600	\$443,150	\$441,000	\$2,656,750	10,500	180	1,890,000	\$1.41
7B. S. Collier/Naples Interconnect-Well &	\$24,810,000	\$744,300	\$496,200	\$0.00	\$ -	\$109,000	\$434,000	\$760,000	\$27,353,500	\$1,924,600	\$481,150	\$504,000	\$2,909,750	12,000	180	2,160,000	\$1.35
Pelican Bay / 8B. Collier County North	\$14,040,000	\$421,200	\$280,800	\$0.00	\$ -	\$61,000	\$246,000	\$430,000	\$15,479,000	\$1,089,100	\$272,275	\$340,200	\$1,701,575	8,100	180	1,458,000	\$1.17
9B. Collier County South-Well & Pipeline	\$11,800,000	\$354,000	\$236,000	\$0.00	\$ -	\$52,000	\$207,000	\$361,000	\$13,010,000	\$915,400	\$228,850	\$277,200	\$1,421,450	6,600	180	1,188,000	\$1.20
10B. Naples-Well & Pipeline	\$10,790,000	\$323,700	\$215,800	\$0.00	\$ -	\$47,000	\$189,000	\$330,000	\$11,895,500	\$837,000	\$209,250	\$226,800	\$1,273,050	5,400	180	972,000	\$1.31
11B. Golden Gate-Well & Pipeline	\$3,760,000	\$112,800	\$75,200	\$0.00	\$ -	\$16,000	\$66,000	\$115,000	\$4,145,000	\$291,600	\$72,900	\$21,000	\$385,500	500	180	90,000	\$4.28
12B. Bonita Springs Utilities-Well & Pipelin	\$6,630,000	\$198,900	\$132,600	\$0.00	\$ -	\$29,000	\$116,000	\$203,000	\$7,309,500	\$514,300	\$128,575	\$100,800	\$743,675	2,400	180	432,000	\$1.72
13B. Coll Cnty N./Coll. Cnty S. Intr.- Well &	\$22,540,000	\$676,200	\$450,800	\$0.00	\$ -	\$99,000	\$394,000	\$690,000	\$24,850,000	\$1,748,500	\$437,125	\$617,400	\$2,803,025	14,700	180	2,646,000	\$1.06
14B. Golden Gate Mine Pits - Transmission	\$7,440,000	\$223,200	\$148,800	\$0.00	\$ -	\$33,000	\$130,000	\$228,000	\$8,203,000	\$577,200	\$144,300	\$63,000	\$784,500	1,500	180	270,000	\$2.91
TOTALS	\$308,380,000	\$9,251,400	\$6,167,600	\$0.00	\$ -	\$1,349,000	\$5,397,000	\$9,444,000	\$339,989,000	\$23,922,000	\$5,980,500	\$6,245,400	\$36,147,900	111,500	180	20,070,000	\$1.80
		Duration of Loan		20 yrs													
		SRF Interest Rate		3.50%													